

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: October 3, 2002, 09:44:39 ; Search time 111.01 Seconds
(without alignments)
1404.625 Million cell updates/sec

Title: US-09-555-093-2
Perfect score: 2410
Sequence: 1 MYVDKNASGLRMKVDGKWLY.....YAMNLOQLKNMAEHIOAKA 443

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 3502263 seqs, 351980561 residues

Total number of hits satisfying chosen parameters: 3502263

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Pending_Patents_AA_Main:*

1: /cgn2_6/ptodata/2/paa/PCRTUS_COMB.pep.*
2: /cgn2_6/ptodata/2/paa/US06_COMB.pep.*
3: /cgn2_6/ptodata/2/paa/US07_COMB.pep.*
4: /cgn2_6/ptodata/2/paa/US080_COMB.pep.*
5: /cgn2_6/ptodata/2/paa/US081_COMB.pep.*
6: /cgn2_6/ptodata/2/paa/US082_COMB.pep.*
7: /cgn2_6/ptodata/2/paa/US083_COMB.pep.*
8: /cgn2_6/ptodata/2/paa/US084_COMB.pep.*
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10: /cgn2_6/ptodata/2/paa/US086_COMB.pep.*
11: /cgn2_6/ptodata/2/paa/US087_COMB.pep.*
12: /cgn2_6/ptodata/2/paa/US088_COMB.pep.*
13: /cgn2_6/ptodata/2/paa/US089_COMB.pep.*
14: /cgn2_6/ptodata/2/paa/US090_COMB.pep.*
15: /cgn2_6/ptodata/2/paa/US091_COMB.pep.*
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17: /cgn2_6/ptodata/2/paa/US093_COMB.pep.*
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19: /cgn2_6/ptodata/2/paa/US095_COMB.pep.*
20: /cgn2_6/ptodata/2/paa/US096_COMB.pep.*
21: /cgn2_6/ptodata/2/paa/US097_COMB.pep.*
22: /cgn2_6/ptodata/2/paa/US098_COMB.pep.*
23: /cgn2_6/ptodata/2/paa/US099_COMB.pep.*
24: /cgn2_6/ptodata/2/paa/US100_COMB.pep.*
25: /cgn2_6/ptodata/2/paa/US101_COMB.pep.*
26: /cgn2_6/ptodata/2/paa/US160_COMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2410	100.0	443	19	US-09-555-093-2
2	2410	100.0	443	19	US-09-555-093-6
3	2400	99.6	443	19	US-09-582-034-20
4	2399	99.5	443	19	US-09-555-093-4
5	2340	97.1	471	19	US-09-555-093-5
6	1092.5	45.3	447	21	PCT-US99-28655-2
7	1092.5	45.3	447	22	US-09-857-583-2

8	1078	44.7	448	19	US-09-582-034-4	Sequence 4, Appli
9	597.5	24.8	422	1	PCT-US99-28655-4	Sequence 4, Appli
10	597.5	24.8	422	22	US-09-857-583-4	Sequence 4, Appli
11	590.5	24.5	525	17	US-09-347-531B-2	Sequence 2, Appli
12	585.5	24.3	453	21	US-09-769-863-14	Sequence 14, Appli
13	557	23.1	457	1	PCT-US00-19011-4	Sequence 4, Appli
14	557	23.1	457	13	US-08-956-985-2	Sequence 2, Appli
15	557	23.1	457	13	US-08-956-985-2	Sequence 2, Appli
16	557	23.1	457	14	US-09-087-578-4	Sequence 4, Appli
17	557	23.1	457	17	US-09-330-235-18	Sequence 18, Appli
18	557	23.1	457	17	US-09-351-525-4	Sequence 4, Appli
19	557	23.1	457	17	US-09-351-525A-4	Sequence 4, Appli
20	557	23.1	457	17	US-09-355-903-2	Sequence 2, Appli
21	557	23.1	457	17	US-09-355-903B-2	Sequence 2, Appli
22	557	23.1	457	17	US-09-363-526-2	Sequence 2, Appli
23	557	23.1	457	17	US-09-367-013B-2	Sequence 2, Appli
24	557	23.1	458	16	US-09-227-613-11	Sequence 11, Appli
25	557	23.1	458	16	US-09-227-613-41	Sequence 41, Appli
26	557	23.1	458	18	US-09-439-261-10	Sequence 10, Appli
27	557	23.1	458	18	US-09-439-261-44	Sequence 44, Appli
28	555	23.0	457	13	US-08-956-985-15	Sequence 15, Appli
29	555	23.0	457	17	US-09-355-901B-4	Sequence 4, Appli
30	555	23.0	457	17	US-09-377-452-4	Sequence 4, Appli
31	555	23.0	457	17	US-09-377-475-4	Sequence 4, Appli
32	501	20.8	355	13	US-08-956-985-7	Sequence 7, Appli
33	501	20.8	355	13	US-08-956-985A-7	Sequence 7, Appli
34	501	20.8	355	17	US-09-355-903-7	Sequence 7, Appli
35	501	20.8	355	17	US-09-355-903B-7	Sequence 7, Appli
36	501	20.8	355	17	US-09-363-526-5	Sequence 5, Appli
37	501	20.8	355	17	US-09-367-013B-5	Sequence 5, Appli
38	485	20.1	323	16	US-09-227-613-17	Sequence 17, Appli
39	485	20.1	323	18	US-09-439-261-17	Sequence 17, Appli
40	463.5	19.2	449	21	US-09-708-427-1025	Sequence 1025, Ap
41	460.5	19.1	458	15	US-09-116-639-5	Sequence 5, Appli
42	460.5	19.1	458	19	US-09-582-034-11	Sequence 11, Appli
43	460.5	19.1	458	21	US-09-719-601-13	Sequence 13, Appli
44	457.5	19.0	447	19	US-09-555-093-7	Sequence 7, Appli
45	457.5	19.0	448	19	US-09-582-034-13	Sequence 13, Appli

ALIGNMENTS

RESULT 1
US-09-555-093-2
; Sequence 2, Application US/09555093
; GENERAL INFORMATION:
; APPLICANT: Napier, Johnathan A.
; TITLE OF INVENTION: Desaturase Genes and their Use
; FILE REFERENCE: 000487.00001
; CURRENT APPLICATION NUMBER: US/09/555,093
; CURRENT FILING DATE: 2000-08-22
; PRIOR APPLICATION NUMBER: UK 9724783.7
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: PCT/GB98/03507
; PRIOR FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 443
; TYPE: PRT
; ORGANISM: C. elegans
US-09-555-093-2

Query Match 100.0%; Score 2410; DB 19; Length 443;
Best Local Similarity 100.0%; Pred. No. 2.le-232;
Matches 443; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MYVDKNASGLRMKVDGKWLYLSEELVKKHPGAVIEQYRNSDATHIFHAFHEGSSQAYKQ 60
DB 1 MYVDKNASGLRMKVDGKWLYLSEELVKKHPGAVIEQYRNSDATHIFHAFHEGSSQAYKQ 60

QY 61 L D L L K K H G H D E F L E K L E K R L D K V D I N V S A Y D V S V A Q E K K M V E S F E K L R Q K L H D D G L M K 120
D B 61 L D L L K K H G H D E F L E K L E K R L D K V D I N V S A Y D V S V A Q E K K M V E S F E K L R Q K L H D D G L M K 120
QY 121 A N E T Y F L F K A I S T L S I M A F A Y L Q Y L G W Y I T S A C L L A L A W Q O F G W L T H E F C H Q O P T K N R P 180
D B 121 A N E T Y F L F K A I S T L S I M A F A Y L Q Y L G W Y I T S A C L L A L A W Q O F G W L T H E F C H Q O P T K N R P 180
QY 181 L N D T I S L F F G N F L Q G F S R D W K D K H N T H A A T N V I D H D G D I D L A P L F A I P G D L C K Y K A S 240
D B 181 L N D T I S L F F G N F L Q G F S R D W K D K H N T H A A T N V I D H D G D I D L A P L F A I P G D L C K Y K A S 240
QY 241 F E K A I L K I V P Y O H L Y F T A M L P M L R F S W T Q S V Q W F K E N Q M E Y K V Y O R N A F W E Q A T I V G H 300
D B 241 F E K A I L K I V P Y O H L Y F T A M L P M L R F S W T Q S V Q W F K E N Q M E Y K V Y O R N A F W E Q A T I V G H 300
QY 301 W A W F Y Q L F L L P T W P L R V A Y F I I S Q M G G L L A H V V T F N H N S V D K Y P A N S R I L N N F A A L Q 360
D B 301 W A W F Y Q L F L L P T W P L R V A Y F I I S Q M G G L L A H V V T F N H N S V D K Y P A N S R I L N N F A A L Q 360
QY 361 I L T R N M T S P F I D M L W G G L N Y Q I E H H L F P T P R C N L N A C V K Y V K E W C K E N N L P Y L V D D Y 420
D B 361 I L T R N M T S P F I D M L W G G L N Y Q I E H H L F P T P R C N L N A C V K Y V K E W C K E N N L P Y L V D D Y 420
QY 421 F D G Y A M N L Q O L K N M A E H I O A K A A 443
D B 421 F D G Y A M N L Q O L K N M A E H I O A K A A 443

RESULT 2

US-09-555-093-6

; Sequence 6, Application US/09555093
; GENERAL INFORMATION:
; APPLICANT: Napier, Johnathan A.
; TITLE OF INVENTION: Desaturase Genes and their Use
; FILE REFERENCE: 000487, 00001
; CURRENT APPLICATION NUMBER: US/09/555,093
; CURRENT FILING DATE: 2000-08-22
; PRIOR APPLICATION NUMBER: UK 9724783.7
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: PCT/GB98/03507
; PRIOR FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 443
; TYPE: PRT
; ORGANISM: Borago
US-09-555-093-6

Query Match 100.0%; Score 2410; DB 19; Length 443;
Best Local Similarity 100.0%; Pred. No. 2.1e-232;
Matches 443; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 M V V D K N A S G L R M K V D G K W L Y L S E E L V K K H P G G A V I E Q Y R N S D A T H I F A F H E G S S O A Y K Q 60
D B 1 M V V D K N A S G L R M K V D G K W L Y L S E E L V K K H P G G A V I E Q Y R N S D A T H I F A F H E G S S O A Y K Q 60
QY 61 L D L L K K H G H D E F L E K L E K R L D K V D I N V S A Y D V S V A Q E K K M V E S F E K L R Q K L H D D G L M K 120
D B 61 L D L L K K H G H D E F L E K L E K R L D K V D I N V S A Y D V S V A Q E K K M V E S F E K L R Q K L H D D G L M K 120
QY 121 A N E T Y F L F K A I S T L S I M A F A Y L Q Y L G W Y I T S A C L L A L A W Q O F G W L T H E F C H Q O P T K N R P 180
D B 121 A N E T Y F L F K A I S T L S I M A F A Y L Q Y L G W Y I T S A C L L A L A W Q O F G W L T H E F C H Q O P T K N R P 180
QY 181 L N D T I S L F F G N F L Q G F S R D W K D K H N T H A A T N V I D H D G D I D L A P L F A I P G D L C K Y K A S 240
D B 181 L N D T I S L F F G N F L Q G F S R D W K D K H N T H A A T N V I D H D G D I D L A P L F A I P G D L C K Y K A S 240
QY 241 F E K A I L K I V P Y O H L Y F T A M L P M L R F S W T Q S V Q W F K E N Q M E Y K V Y O R N A F W E Q A T I V G H 300
D B 241 F E K A I L K I V P Y O H L Y F T A M L P M L R F S W T Q S V Q W F K E N Q M E Y K V Y O R N A F W E Q A T I V G H 300

D B 241 F E K A I L K I V P Y O H L Y F T A M L P M L R F S W T Q S V Q W F K E N Q M E Y K V Y O R N A F W E Q A T I V G H 300
QY 301 W A W F Y Q L F L L P T W P L R V A Y F I I S Q M G G L L A H V V T F N H N S V D K Y P A N S R I L N N F A A L Q 360
D B 301 W A W F Y Q L F L L P T W P L R V A Y F I I S Q M G G L L A H V V T F N H N S V D K Y P A N S R I L N N F A A L Q 360
QY 361 I L T R N M T S P F I D M L W G G L N Y Q I E H H L F P T P R C N L N A C V K Y V K E W C K E N N L P Y L V D D Y 420
D B 361 I L T R N M T S P F I D M L W G G L N Y Q I E H H L F P T P R C N L N A C V K Y V K E W C K E N N L P Y L V D D Y 420
QY 421 F D G Y A M N L Q O L K N M A E H I O A K A A 443
D B 421 F D G Y A M N L Q O L K N M A E H I O A K A A 443
RESULT 3
US-09-582-034-20
; Sequence 20, Application US/09582034
; GENERAL INFORMATION:
; APPLICANT: Napier, Johnathan A.
; APPLICANT: Michaelson, Louise
; APPLICANT: Stobart, Keith
; TITLE OF INVENTION: Desaturase
; FILE REFERENCE: 00487, 00003
; CURRENT APPLICATION NUMBER: US/09/582,034
; CURRENT FILING DATE: 2000-12-19
; PRIOR APPLICATION NUMBER: PCT/GB98/03895
; PRIOR FILING DATE: 1998-12-23
; PRIOR APPLICATION NUMBER: UK 9814034.6
; PRIOR FILING DATE: 1998-06-29
; PRIOR APPLICATION NUMBER: UK 9727256.1
; PRIOR FILING DATE: 1997-12-23
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 443
; TYPE: PRT
; ORGANISM: C. elegans
US-09-582-034-20

Query Match 99.6%; Score 2400; DB 19; Length 443;
Best Local Similarity 99.5%; Pred. No. 2.1e-231;
Matches 441; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 M V V D K N A S G L R M K V D G K W L Y L S E E L V K K H P G G A V I E Q Y R N S D A T H I F A F H E G S S O A Y K Q 60
D B 1 M V V D K N A S G L R M K V D G K W L Y L S E E L V K K H P G G A V I E Q Y R N S D A T H I F A F H E G S S O A Y K Q 60
QY 61 L D L L K K H G H D E F L E K L E K R L D K V D I N V S A Y D V S V A Q E K K M V E S F E K L R Q K L H D D G L M K 120
D B 61 L D L L K K H G H D E F L E K L E K R L D K V D I N V S A Y D V S V A Q E K K M V E S F E K L R Q K L H D D G L M K 120
QY 121 A N E T Y F L F K A I S T L S I M A F A Y L Q Y L G W Y I T S A C L L A L A W Q O F G W L T H E F C H Q O P T K N R P 180
D B 121 A N E T Y F L F K A I S T L S I M A F A Y L Q Y L G W Y I T S A C L L A L A W Q O F G W L T H E F C H Q O P T K N R P 180
QY 181 L N D T I S L F F G N F L Q G F S R D W K D K H N T H A A T N V I D H D G D I D L A P L F A I P G D L C K Y K A S 240
D B 181 L N D T I S L F F G N F L Q G F S R D W K D K H N T H A A T N V I D H D G D I D L A P L F A I P G D L C K Y K A S 240
QY 241 F E K A I L K I V P Y O H L Y F T A M L P M L R F S W T Q S V Q W F K E N Q M E Y K V Y O R N A F W E Q A T I V G H 300
D B 241 F E K A I L K I V P Y O H L Y F T A M L P M L R F S W T Q S V Q W F K E N Q M E Y K V Y O R N A F W E Q A T I V G H 300
QY 301 W A W F Y Q L F L L P T W P L R V A Y F I I S Q M G G L L A H V V T F N H N S V D K Y P A N S R I L N N F A A L Q 360
D B 301 W A W F Y Q L F L L P T W P L R V A Y F I I S Q M G G L L A H V V T F N H N S V D K Y P A N S R I L N N F A A L Q 360
QY 361 I L T R N M T S P F I D M L W G G L N Y Q I E H H L F P T P R C N L N A C V K Y V K E W C K E N N L P Y L V D D Y 420
D B 361 I L T R N M T S P F I D M L W G G L N Y Q I E H H L F P T P R C N L N A C V K Y V K E W C K E N N L P Y L V D D Y 420

Qy 421 FDGYAMNLOQLKNAEHIQAKAA 443
 Db 421 FDGYAMNLOQLKNAEHIQAKAA 443

RESULT 4
 US-09-555-093-4
 ; Sequence 4, Application US/09555093
 ; GENERAL INFORMATION:
 ; APPLICANT: Napier, Johnathan A.
 ; TITLE OF INVENTION: Desaturase Genes and their use
 ; FILE REFERENCE: 000487.00001
 ; CURRENT APPLICATION NUMBER: US/09/555.093
 ; CURRENT FILING DATE: 2000-08-22
 ; PRIOR APPLICATION NUMBER: UK 9724783.7
 ; PRIOR FILING DATE: 1997-11-24
 ; PRIOR APPLICATION NUMBER: PCT/GB98/03507
 ; PRIOR FILING DATE: 1998-11-24
 ; NUMBER OF SEQ ID NOS: 8
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 4
 ; LENGTH: 443
 ; TYPE: PRT
 ; ORGANISM: C. elegans
 US-09-555-093-4

Query Match 99.5%; Score 2399; DB 19; Length 443;
 Best Local Similarity 99.8%; Pred. No. 2.7e-231;
 Matches 442; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MVDKNASGLRMKVDGKWLILSEELVKKHGPGAVIEQYRNSDATHIFHAFHEGSSQAYKQ 60
 Db 1 MVDKNASGLRMKVDGKWLILSEELVKKHGPGAVIEQYRNSDATHIFHAFHEGSSQAYKQ 60
 Qy 61 LDLLKKHGEHDEFLEKLEKRLDKVDINVSAYDVSVAQEKKMWSEFEKLRQKLHDDGLMK 120
 Db 61 LDLLKKHGEHDEFLEKLEKRLDKVDINVSAYDVSVAQEKKMWSEFEKLRQKLHDDGLMK 120
 Qy 121 ANETVFLFKATLSIMAFAYLQYLGWYITTSACLLALAWQOFGWLTHFCHQOQTKNRP 180
 Db 121 ANETVFLFKATLSIMAFAYLQYLGWYITTSACLLALAWQOFGWLTHFCHQOQTKNRP 180
 Qy 181 LNDTSLFFGNFLOGFSRDWKKHNTHTAATNVIDHGDGIDLAFIPGDLCKYKAS 240
 Db 181 LNDTSLFFGNFLOGFSRDWKKHNTHTAATNVIDHGDGIDLAFIPGDLCKYKAS 240
 Qy 241 FEKAILKIVPYOHLFTAMLPLRFSTGQSVQWVFKENQMEYKVIQYRNATFEQATIVGH 300
 Db 241 FEKAILKIVPYOHLFTAMLPLRFSTGQSVQWVFKENQMEYKVIQYRNATFEQATIVGH 300
 Qy 301 WAWVFYQLFLLPTWPLRVAYFTIISQMGGLLHAHVVTNHNNSVDKYPANSRLNNFAALQ 360
 Db 301 WAWVFYQLFLLPTWPLRVAYFTIISQMGGLLHAHVVTNHNNSVDKYPANSRLNNFAALQ 360
 Qy 361 ILTTRNMTSPFPIDWLGGLNLYQIEHLLFTMPRCNLNACVKYKWKCKENNLPLYVDY 420
 Db 361 ILTTRNMTSPFPIDWLGGLNLYQIEHLLFTMPRCNLNACVKYKWKCKENNLPLYVDY 420
 Qy 421 FDGYAMNLOQLKNAEHIQAKAA 443
 Db 421 FDGYAMNLOQLKNAEHIQAKAA 443

RESULT 5
 US-09-555-093-5
 ; Sequence 5, Application US/09555093
 ; GENERAL INFORMATION:
 ; APPLICANT: Napier, Johnathan A.
 ; TITLE OF INVENTION: Desaturase Genes and their use
 ; FILE REFERENCE: 000487.00001
 ; CURRENT APPLICATION NUMBER: US/09/555.093
 ; CURRENT FILING DATE: 2000-08-22

; PRIOR APPLICATION NUMBER: UK 9724783.7
 ; PRIOR FILING DATE: 1997-11-24
 ; PRIOR APPLICATION NUMBER: PCT/GB98/03507
 ; PRIOR FILING DATE: 1998-11-24
 ; NUMBER OF SEQ ID NOS: 8
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 5
 ; LENGTH: 471
 ; TYPE: PRT
 ; ORGANISM: C. elegans
 US-09-555-093-5

Query Match 97.1%; Score 2340; DB 19; Length 471;
 Best Local Similarity 92.8%; Pred. No. 2.5e-225;
 Matches 439; Conservative 1; Mismatches 1; Indels 32; Gaps 3;
 Qy 1 MVDKNASGLRMKVDGKWLILSEELVKKHGPGAVIEQYRNSDATHIFHAFHEGSSQAYKQ 37
 Db 1 MVDKNASGLRMKVDGKWLILSEELVKKHGPGAVIEQYRNSDATHIFHAFHEGSSQAYKQ 59
 Qy 38 -----YRNSDATHIFHAFHEGSSQAYKQDLKKHGEHDEFLEKLEKRLDKVDINVS 90
 Db 60 ALDILFYRNSDATHIFHAFHEGSSQAYKQDLKKHGEHDEFLEKLEKRLDKVDINVS 119
 Qy 91 AYDVSVAQEKKMWSEFEKLRQKLHDDGLMKANETVFLFKATLSIMAFAYLQYLGWYI 150
 Db 120 AYDVSVAQEKKMWSEFEKLRQKLHDDGLMKANETVFLFKATLSIMAFAYLQYLGWYI 178
 Qy 151 TSACLLALAWQOFGWLTHFCHQOQTKNRPNDTSLFFGNFLOGFSRDWKKHNTHTA 210
 Db 179 TSACLLALAWQOFGWLTHFCHQOQTKNRPNDTSLFFGNFLOGFSRDWKKHNTHTA 238
 Qy 211 ATNVIDHGDGIDLAFIPGDLCKYKASEKAILKIVPYOHLFTAMLPLRFSTGQ 270
 Db 239 ATNVIDHGDGIDLAFIPGDLCKYKASEKAILKIVPYOHLFTAMLPLRFSTGQ 298
 Qy 271 SVQWVFKENQMEYKVIQYRNATFEQATIVGHAWVFYQLFLLPTWPLRVAYFTIISQMGGL 330
 Db 299 SVQWVFKENQMEYKVIQYRNATFEQATIVGHAWVFYQLFLLPTWPLRVAYFTIISQMGGL 358
 Qy 331 LIAHVVTNHNNSVDKYPANSRLNNFAALQILTTRNMTSPFPIDWLGGLNLYQIEHLLFP 390
 Db 359 LIAHVVTNHNNSVDKYPANSRLNNFAALQILTTRNMTSPFPIDWLGGLNLYQIEHLLFP 418
 Qy 391 TMAPRCNLNACVKYKWKCKENNLPLYVDYFDGYAMNLOQLKNAEHIQAKAA 443
 Db 419 TMAPRCNLNACVKYKWKCKENNLPLYVDYFDGYAMNLOQLKNAEHIQAKAA 471

RESULT 6
 PCT-US99-28655-2
 ; Sequence 2, Application PC/TUS9928655
 ; GENERAL INFORMATION:
 ; APPLICANT: Browse, John et al.
 ; TITLE OF INVENTION: Desaturases and Methods of Using Them for Synthesis of
 ; FILE REFERENCE: Polyunsaturated Fatty Acids
 ; FILE REFERENCE: 53860
 ; CURRENT APPLICATION NUMBER: PCT/US99/28655
 ; CURRENT FILING DATE: 1999-12-06
 ; EARLIER APPLICATION NUMBER: 60/111,301
 ; EARLIER FILING DATE: 1998-12-07
 ; NUMBER OF SEQ ID NOS: 13
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 2
 ; LENGTH: 447
 ; TYPE: PRT
 ; ORGANISM: Caenorhabditis elegans
 PCT-US99-28655-2

Query Match 45.3%; Score 1092.5; DB 1; Length 447;
 Best Local Similarity 46.3%; Pred. No. 4.1e-100;


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Db 309 QLYFLPDWSTIMFVSLVGLSHVVTENHYSEKFASSNIMSNYACIQIMTTRN 368
QY 367 MTPSPIDWGLNQLYQIEHLLPPTMPCRNACVKYKWECKENLPLYLVDYFDGYAM 426
Db 369 MRPGFIDWGLNQLYQIEHLLPPTMPCRNLTAVMPPLYKEFAAANGPLVWDDYFTGFWL 428
QY 427 NLQOLKNMAEHIOAK 441
Db 429 EIEQFRNIA-NVAAK 442

RESULT 9
PCT-US99-28655-4
; Sequence 4, Application PC/TUS9928655
; GENERAL INFORMATION:
; APPLICANT: Browne, John et al.
; TITLE OF INVENTION: Desaturases and Methods of Using Them for Synthesis of
; FILE REFERENCE: 53860
; CURRENT APPLICATION NUMBER: PCT/US99/28655
; EARLIER FILING DATE: 1999-12-06
; EARLIER FILING DATE: 1998-12-07
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 4
; LENGTH: 422
; TYPE: PRT
; ORGANISM: Euglena gracilis
PCT-US99-28655-4

Query Match 24.8%; Score 597.5; DB 1; Length 422;
Best Local Similarity 34.3%; Pred. No. 1.9e-50;
Matches 146; Conservative 70; Mismatches 171; Indels 39; Gaps 10;

QY 26 VKKHPGGA-VIEQYRNSDATHIFAFHFGSSQAYKQDLKKHGEHDEFLEKQLEKRLDK 84
Db 24 VNFHPGGAIEIENYQGRDATDAFVMVH--FQEAFDKL-----KRMKP 63
QY 85 VDINVSAYDVSAQEKWVESEKLRQKLDHDDGLMKANETYFLFKAI STLSTMAFAFYL- 143
Db 64 INPSFELPQAAVNEAQ--EDFRKREELIATGMFDASPLWYSYKISTTLGLVGLGYFLM 121
QY 144 -OYLGWYITSACLLALAWOFGWLTHFCHQOQPTKNRPLNDTISLFFGFLGFSRDWVK 202
Db 122 VOYQMYFI-GAVLLGMHYQMGWLSHDICHQHTFKNRNNWNLVGLVFGNLOGFSVTCWK 180
QY 203 DKHNTHTAATNYVDHGDIDLAPLFAFIPGDLCKYKASFEKAILKIVPYQHLYFTAMLPM 262
Db 181 DRHNAHSATNYQGHDPDIDNLPPLAWSBDDVTRASPISR----KLIOQOQYVFLVICIL 236
QY 263 LRFSTWGSQVQV----FKENQMEYKYVORNAFWEQATIVGHWA-VFQLELLPTWPLR 317
Db 237 LRFIMCFQCVLTVRSUKDRDNQFYRSQYKKEAI----GLALHWTLKALFHLFFMPSILTS 292
QY 318 VAYFIISOMGGGLLTAHVVTFNHNSVDKYPANSRLNFAALQILTRNMTSPFIDWLW 377
Db 293 LLVFFVSELVGGFGTAIVVFMNHYPLEKIGDPWDGHSVSGQIHETMNIIRGIITDWEFF 352
QY 378 GGLNYQIEHLLPPTMPCRNACVKYKWECKENLPLYLVDYFDGYAMNLOOLKNMAEH 437
Db 353 GGLNYQIEHLLPPTMPCRNLTAVSYQVEQLCQKHNLPYRNPLPHEGLVILLRYLAVFARM 412
QY 438 IOAKAA 443
Db 413 AEKQPA 418

RESULT 10
US-09-857-583-4
; Sequence 4, Application US/09857583
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; GENERAL INFORMATION:
; APPLICANT: Browne, John et al.
; TITLE OF INVENTION: DESATURASES AND METHODS OF USING THEM FOR SYNTHESIS OF POLYUNDS
; FILE REFERENCE: 4630-58963
; CURRENT APPLICATION NUMBER: US/09/857,583
; PRIOR FILING DATE: 2001-06-05
; PRIOR FILING DATE: 1998-12-07
; PRIOR FILING DATE: 1999-12-06
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 4
; LENGTH: 422
; TYPE: PRT
; ORGANISM: Euglena gracilis
US-09-857-583-4

Query Match 24.8%; Score 597.5; DB 22; Length 422;
Best Local Similarity 34.3%; Pred. No. 1.9e-50;
Matches 146; Conservative 70; Mismatches 171; Indels 39; Gaps 10;

QY 26 VKKHPGGA-VIEQYRNSDATHIFAFHFGSSQAYKQDLKKHGEHDEFLEKQLEKRLDK 84
Db 24 VNFHPGGAIEIENYQGRDATDAFVMVH--FQEAFDKL-----KRMKP 63
QY 85 VDINVSAYDVSAQEKWVESEKLRQKLDHDDGLMKANETYFLFKAI STLSTMAFAFYL- 143
Db 64 INPSFELPQAAVNEAQ--EDFRKREELIATGMFDASPLWYSYKISTTLGLVGLGYFLM 121
QY 144 -OYLGWYITSACLLALAWOFGWLTHFCHQOQPTKNRPLNDTISLFFGFLGFSRDWVK 202
Db 122 VOYQMYFI-GAVLLGMHYQMGWLSHDICHQHTFKNRNNWNLVGLVFGNLOGFSVTCWK 180
QY 203 DKHNTHTAATNYVDHGDIDLAPLFAFIPGDLCKYKASFEKAILKIVPYQHLYFTAMLPM 262
Db 181 DRHNAHSATNYQGHDPDIDNLPPLAWSBDDVTRASPISR----KLIOQOQYVFLVICIL 236
QY 263 LRFSTWGSQVQV----FKENQMEYKYVORNAFWEQATIVGHWA-VFQLELLPTWPLR 317
Db 237 LRFIMCFQCVLTVRSUKDRDNQFYRSQYKKEAI----GLALHWTLKALFHLFFMPSILTS 292
QY 318 VAYFIISOMGGGLLTAHVVTFNHNSVDKYPANSRLNFAALQILTRNMTSPFIDWLW 377
Db 293 LLVFFVSELVGGFGTAIVVFMNHYPLEKIGDPWDGHSVSGQIHETMNIIRGIITDWEFF 352
QY 378 GGLNYQIEHLLPPTMPCRNACVKYKWECKENLPLYLVDYFDGYAMNLOOLKNMAEH 437
Db 353 GGLNYQIEHLLPPTMPCRNLTAVSYQVEQLCQKHNLPYRNPLPHEGLVILLRYLAVFARM 412
QY 438 IOAKAA 443
Db 413 AEKQPA 418

RESULT 11
US-09-347-531B-2
; Sequence 2, Application US/09347531B
; GENERAL INFORMATION:
; APPLICANT: Heinz, Ernst
; APPLICANT: Girke, Thomas
; APPLICANT: Scheffler, Jodi
; APPLICANT: Silva, Oswaldo De Costa E.
; APPLICANT: Lerchl, Jens
; TITLE OF INVENTION: Characterization of a new Delta-6 Desaturase from Physcomitrel
; FILE REFERENCE: OZ 0050-50461
; CURRENT APPLICATION NUMBER: US/09/347,531B
; CURRENT FILING DATE: 1999-07-06
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patent in Vers. 2.0/WordPerfect 6.1
; SEQ ID NO 2
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; LENGTH: 525
; TYPE: PRM
; ORGANISM: Physcomitrella patens
US-09-347-531B-2

Query Match      24.5%; Score 590.5; DB 17; Length 525;
Best Local Similarity 32.5%; Pred. No. 1.3e-49;
Matches 140; Conservative 76; Mismatches 160; Indels 55; Gaps 12;

QY 19 LYLSEELVKHPGGAIVEQYRNSDATHIFAFHEGSSQAYKOLDLLKKHGEHDEFEKQL 78
Db 127 VIDVSNFADEHPGGSVISTYFGRDGTDFVSSFAASTWKILQ-----DFYIGDV 175

QY 79 EKRLDKVDINVSAYDVSAQEKKMFESFEKLRLQKLDHDDGLMKANETVYFLFKAIK 138
Db 176 ER-----VEPTPELLKDFREMRALFLREQLFKSKLYYVKKLITNVAI-- 218

QY 139 FAFYLOYLW-----YITSACLLALAWQOFGWLTHERFCHQOQTKNRPNDTSLFFGNF 192
Db 219 FAASIAIICKSKTISAVLASACNMALCFQOCQWLSHDFLHNQVFETRNLNEVYVIGNA 278

QY 193 LOGFSRDKKDKHNTTHAATNVIDH-----DGDIDLAPLFAFIPGDLCKYKAFKAILK 247
Db 279 VLFGSTGMWKEKHNHLHAAANECDQTYQPIDEDIDLPLTAWSKDILATVE---NKTFLR 335

QY 248 IVPYOHLYFTAMPLMLRFSWTGOSVQVWFKEQKMEYKQYORNAFWEOATIVGHAW-VFY 306
Db 336 ILQYHLLFFNGLLFFARGSWLFS--WRYTSTAVLSV-----DRLEKGVILFYHFWVGT 390

QY 307 QLFLPTW-PLRVAYFTISQGGGLLHAYVVTFNHNSVDKYPANSRLNNFAALQILTR 365
Db 391 ACYLLPGWKPL--VMMAVTELSMGLGFVFLSHNGMEVYNS--KEFSAQIVSTR 444

QY 366 NMPSPPIDLWGLNLYQIEHLLPPTMPCRNLCNACVYKWKENCNNLPVLVDYDGYA 425
Db 445 DIKGNIFNDFTGLNQLQIEHLLPPTMPCRNLCNACVYKWKENCNNLPVLVDYDGYA 504

QY 426 MNLQOLKNMAE 436
Db 505 KVLKALKEVAE 515

RESULT 12
US-09-769-863-14
; Sequence 14, Application US/09769863
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Das, Tapas
; APPLICANT: Thurmond, Jennifer
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
; FILE REFERENCE: 6763.US.01
; CURRENT APPLICATION NUMBER: US/09/769,863
; CURRENT FILING DATE: 2001-01-25
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 453
; TYPE: PRM
; ORGANISM: Saprolegnia diclina
US-09-769-863-14

Query Match      24.3%; Score 585.5; DB 21; Length 453;
Best Local Similarity 32.3%; Pred. No. 3.4e-49;
Matches 146; Conservative 81; Mismatches 164; Indels 61; Gaps 14;

QY 15 DGKWLKYLSEELVKHPGGAIVEQYRNSDATHIFAFHEGSSQAYKOLDLLKKHGE 69
Db 22 DNAMIVTHHKVYDISAFEDHPGGSVMTQAGEDATDAFAVFHPSSA-----LKLLEYV 76

QY 70 HDEFLEKQLEKRLDKVDINVSAYDVSAQEKK-----MVESFEKLRQKLDHDDGLMKANET 124
Db 77 GD-----VDQSTAAVDTSTISDEVKKSQSDFIASRYKRLRLEVKRLGLYDSSKL 123

QY 125 YFLFKAIKSTILSI-----MAFAFYLOYLWYITSACLLALAWQOFGWLTHERFCHQOQTKNRP 180
Db 124 YLYLKCASTLSIALVSAALICLHFDSTAMYMVAAILGLFYQOCQWLAHDFLHQVFENHL 183

QY 181 LNDTISLFFGNFLOGFSRDKKDKHNTTHAATNV-----IDHGDIDLAPLFAFIPGD 233
Db 184 FGLVGMVGNLWQGSVQVWKKHNTTHAIPNLHATPEIAFHGDDPDIDTMTPLAW---S 240

QY 234 LCKYKASFEKAI-LKIVPYQ-HLYFTAMPLMLRFSWTGOSVQVWFKE-----NQMEYK 284
Db 241 LKMAQHAVIDSPVGLFPMRYQAYLYFPILL-FARISWVIQSAFYFNVGPGGTFDKVQVP 299

QY 285 VYORNAFWEOATIVGHAWVYFQFLPTWPLRVAYFI-ISQMGGLLHAYVTFNHSV 343
Db 300 LLER-----AGLLYYGWNGLGLVYAANMSLLQAAAFLEVSQASGLFLAMVFSVGHNGM 353

QY 344 DKYPANSRLNNFAALQILTRNMTSPFIDLWGLNLYQIEHLLPPTMPCRNLCNACVKY 403
Db 354 EYFDKDSK--PDFWKQVLSRNTVSTSLWDIDPMGLNTQIDHLLFPMPVRRHNLPALNLV 411

QY 404 VKEWCKENNLPLYLVDYDFDGYAMNLOOLKNMA 435
Db 412 VKSLCKQYDIPYHETGFIAGMAEVVVHLERIS 443

RESULT 13
PCT-US00-19011-4
; Sequence 4, Application PC/TUS0019011
; GENERAL INFORMATION:
; APPLICANT: Kopschick, John J.
; APPLICANT: Kelder, Bruce
; TITLE OF INVENTION: Mammalian Cells Expressing Desaturases and Elongases
; FILE REFERENCE: OHU-03765
; CURRENT APPLICATION NUMBER: PCT/US00/19011
; CURRENT FILING DATE: 2000-07-11
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 457
; TYPE: PRM
; ORGANISM: Mortierella Alpina
PCT-US00-19011-4

Query Match      23.1%; Score 557; DB 1; Length 457;
Best Local Similarity 32.1%; Pred. No. 2.5e-46;
Matches 143; Conservative 64; Mismatches 187; Indels 52; Gaps 11;

QY 12 MKVDGKWLKYLSEELVKHPGGAIVEQYRNSDATHIFAFHEGSSQAYKOLDLLKKHGEHD 71
Db 34 MIIDNK-VYDVREFPDHPGGSVILTHVGKDGDTDFTEHPEAAW----- 77

QY 72 EFLEKQLEKRLDKVDINVSAYDVSAQEKKMFESFEKLRQKLDHDDGLMKANETVYFLFKAI 131
Db 78 ETLANFYVGDDIDESDRDIKNDFFA-AEVRKRLTFLQSL-----GYDSSKAYAFKVS 129

QY 132 STLSIMAFAYLOYLW-----YITSACLLALAWQOFGWLTHERFCHQOQTKNRPNDT 184
Db 130 FNLCINGLSTVI-VAKWGOTSTLANVLSAALLGLFWQOCQWLAHDFLHQVQDRFWGDL 188

QY 185 ISLFFGNFLOGFSRDKKDKHNTTHAATNVIDHGDIDLAPL-----FAFTPG-D 233
Db 189 FGAFLLGVQCGFSSSWKDKHNTTHAAPNVHGEDPDIDTHTPLLTWSEHALEMFSVDPEE 248

QY 234 LCKYKASFEKAIKIVPYOHLYFTAMPLMLRFSWTGOSVQVWFKEQKMEYKQVYQV--NAF 291
Db 249 LTRMMSRF-----MVLNQTWTFPILSPARLSWCLQSLILFLPNGOAHKPSGARVPISL 302
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Qy 292 WEQATVGHWAQVYQLEFLPTWPLR-VAYFIISOMGGGLIAHVVTFNHNNSVDKYPANS 350
Db 303 VEQLSLAMHWTWYLATMFLFKDPVNMVFLVSVQVCGNLLAIVFSLNHNMGMPVISKEE 362
Qy 351 RILNFAALQILITRNTPSPFIDWLGGLNYQIEHHLLFPTMPCNLCNACVYKWKCKE 410
Db 363 AVDMDFTKQITGRDHPGLFANFTGGLNYQIEHHLLFPTMPCNLCNACVYKWKCKE 422
Qy 411 NNLPLYDDYFDGYAMNQLQKNMAE 436
Db 423 YNVRYHTTGMIEGTAEVFSRLNEVSK 448

RESULT 14
US-08-956-985-2
; Sequence 2, Application US/08956985
; GENERAL INFORMATION:
; APPLICANT: KNUTZON, DEBORAH
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR SYNTHESIS
; OF LONG CHAIN POLY-UNSATURATED FATTY ACIDS IN PLANTS
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: RAE-VENTER LAW GROUP, P.C.
; STREET: 260 SHERIDAN AVENUE, P.O. BOX 60039
; CITY: PALO ALTO
; STATE: CA
; COUNTRY: USA
; ZIP: 94306
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/956.985
; FILING DATE: 24-OCT-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/834.033
; FILING DATE: 11-APR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/833.610
; FILING DATE: 11-APR-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: RAE-VENTER, BARBARA
; REGISTRATION NUMBER: 32,750
; REFERENCE/DOCKET NUMBER: CGNE.128.01US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650) 328-4400
; TELEFAX: (650) 328-4477
; TELEX: N/A
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 457 amino acids
; TYPE: amino acid
; STRANDEDNESS: not relevant
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-956-985-2

Query Match 23.1%; Score 557; DB 13; Length 457;
Best Local Similarity 32.1%; Pred. No. 2.5e-46;
Matches 143; Conservative 64; Mismatches 187; Indels 52; Gaps 11;

Qy 12 MKVQGWLYLSELYKKHGGAVIQYRNSDATHIFAFHGGSSQAYKQLDLKKHGHED 71
Db 34 MIIDNK-VYDREFPDHPGGSVILTHVGKDGTDVDFTHPEAAW----- 77
Qy 72 EFLEKLEKRLKLDVINSVDSVAQKKVVESEKLRQKLHDDGLMKANETFLFKAI 131
Db 78 ETLANFYVGDIIDSDRIKNDFA-AEVRKRLTLFQSL-----GYDSSKAYYAFKVS 129

Qy 132 STLSTMAFAFYLIQYLGW-----YITSACLLALAWQOQGLWTHFECHQOQPTKNRPLNDT 184
Db 130 FNLCIWGLSTVI-VAKWGQSTSTLANVLSAALLGLFWQCGMLAHDFLHHQVQDFRFGDL 188
Qy 185 ISLFFGNFLQFSRDWKKDKHNTHTAATNVIDHDGDDIDLAPL-----FAFIG-D 233
Db 189 FGAFLGGYCOGFSSSWKKDKHNTHTAADNVHGEDPDIDHTHLLTWSEHALEMFSDVPDEE 248
Qy 234 LCKYKASPEKAILKIVPYQHLYFTAMLPMLRFSWTGQSVQWVEKENQMEYKVYOR--NAF 291
Db 249 LTRWMSRF-----MVLNQTWYFPILSFARLSWCLQSLFVLPNGQAHKPSGARVPISL 302
Qy 292 WEQATVGHWAQVYQLEFLPTWPLR-VAYFIISOMGGGLIAHVVTFNHNNSVDKYPANS 350
Db 303 VEQLSLAMHWTWYLATMFLFKDPVNMVFLVSVQVCGNLLAIVFSLNHNMGMPVISKEE 362
Qy 351 RILNFAALQILITRNTPSPFIDWLGGLNYQIEHHLLFPTMPCNLCNACVYKWKCKE 410
Db 363 AVDMDFTKQITGRDHPGLFANFTGGLNYQIEHHLLFPTMPCNLCNACVYKWKCKE 422
Qy 411 NNLPLYDDYFDGYAMNQLQKNMAE 436
Db 423 YNVRYHTTGMIEGTAEVFSRLNEVSK 448

RESULT 15
US-08-956-985A-2
; Sequence 2, Application US/08956985A
; GENERAL INFORMATION:
; APPLICANT: KNUTZON, DEBORAH
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR SYNTHESIS
; OF LONG CHAIN POLY-UNSATURATED FATTY ACIDS
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: RAE-VENTER LAW GROUP, P.C.
; STREET: P.O. Box 60039
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94306-0039
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/956.985A
; FILING DATE: 24-OCT-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/834.033
; FILING DATE: 11-APR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/833.610
; FILING DATE: 11-APR-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: RAE-VENTER, BARBARA
; REGISTRATION NUMBER: 32,750
; REFERENCE/DOCKET NUMBER: CGNE128.01US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650) 328-4400
; TELEFAX: (650) 328-4477
; TELEX: N/A
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 457 amino acids
; TYPE: amino acid
; STRANDEDNESS: not relevant
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-956-985A-2

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Query Match      23.1%; Score 557; DB 13; Length 457;
Best Local Similarity 32.1%; Pred. No. 2.5e-46;
Matches 143; Conservative 64; Mismatches 187; Indels 52; Gaps 11;

QY 12 MKYDGNWLYLSELYKXKHPGGAVIEQYRNSDATHIFAHFHEGSSQAYKOLDLLKKHGEHD 71
DB 34 MIIDNK-VYDVRFPDHPGGVILTHVGKDGTDVDFTEPEAAW----- 77
QY 72 EFLEKQLEKRLDKVDINVSAYDVSAQEKMMVESFEKLRQKLDHDKLMAKANEYFLFKAI 131
DB 78 ETLANFYVGDISSDRDKNDQFA-AEVRKRLTFQSL-----GYDSSKAYAFKVS 129
QY 132 STLSIMAFAYLYQYLGW-----YITSACLLALAWQQFGWLTHERFCHQOPTKNRPLNDT 184
DB 130 FNLCIWLSTVI-VAKWGOTSTLANVLSAALLGLFWQCGWLAHDFLHHQVFDREWGDL 188
QY 185 ISLFFGNFLOGFSRDWKKHNTHTHAATVVIDHGDIDIDLAPL-----FAFIPG-D 233
DB 189 FGAFLLGGVCGQFSSWKKHNTHTHAAPNVHGEDPDIDTHTPLLTWSEHALEMFSVDPDEE 248
QY 234 LCRYKASFEKAILKIVPYQHLVFTAMPLRFSWTGQSVQWVFKEKQMEYKVYQR--NAF 291
DB 249 LTRMNSRF-----WVLNQTWFYFPILSFARLSWCLOSILFVLPNCQAHKPSGARVPISL 302
QY 292 WEQATIVGHWAVFYQLFLLPTWPLR-VAYFIISQMGGLLIAHVVTFNHNSVDKYPANS 350
DB 303 VEOLSLAMHWTYLATMFLFIKDPVNMVFLVSVQAVCGNLLAIVFSLNHNHNGMPVISKEE 362
QY 351 RILNNAALQILTRNMTSPFIDWLWGLNLYQIEHHLFPTWPRCNLNACVKYVKEWCKE 410
DB 363 AVDMDFTKOITIGRDVHFGLEFANWFTGGLNYQIEHHLFPMRHRNFSKIQPAVETLCKK 422
QY 411 NNLPLYLVDDYFDGYAMNLOOLKNMAE 436
DB 423 YNVRVHTTGMEGTAEVFSRLNEYSK 448
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Search completed: October 3, 2002, 09:50:30
Job time: 351 sec

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OM protein - protein search, using sw model

Run on: October 3, 2002, 09:46:39 ; Search time 44.66 Seconds
(without alignments)
2722.906 Million cell updates/sec

Title: US-09-555-093-2
Perfect score: 2410
Sequence: 1 MVYDKNASGLRMKVDGKWLX.....YAMNLOQLKNAEHQAKA 443

Scoring table:
BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 995467 seqs, 274503342 residues

Total number of hits satisfying chosen parameters: 995467

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_AA_New.*
1: /cgn2.6/prodata/1/paa/PCT_NEW_COMB.pep.*
2: /cgn2.6/prodata/1/paa/US06_NEW_COMB.pep.*
3: /cgn2.6/prodata/1/paa/US07_NEW_COMB.pep.*
4: /cgn2.6/prodata/1/paa/US08_NEW_COMB.pep.*
5: /cgn2.6/prodata/1/paa/US09_NEW_COMB.pep.*
6: /cgn2.6/prodata/1/paa/US10_NEW_COMB.pep.*
7: /cgn2.6/prodata/1/paa/US60_NEW_COMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2382	98.8	473	US-60-360-039-6108	Sequence 6108, Ap
2	1079	44.8	454	US-60-360-039-6107	Sequence 6107, Ap
3	592	24.6	520	US-09-980-468-12	Sequence 12, Appl
4	590.5	24.5	525	US-10-019-048-2	Sequence 2, Appl
5	577	23.9	459	US-09-967-477B-8	Sequence 8, Appl
6	559	23.2	483	US-09-980-468-2	Sequence 2, Appl
7	558	23.2	483	US-09-980-468-4	Sequence 4, Appl
8	557	23.1	457	US-09-791-537-137323	Sequence 137323, A
9	556	23.1	457	US-09-791-537-28566	Sequence 28566, A
10	463.5	19.2	449	US-09-935-625-19395	Sequence 19395, A
11	463.5	19.2	449	US-09-791-537-131173	Sequence 131173, A
12	460.5	19.0	458	US-09-791-537-146143	Sequence 146143, A
13	457.5	19.0	448	US-09-791-537-105419	Sequence 105419, A
14	454.5	18.9	448	US-09-791-537-102275	Sequence 102275, A
15	452	18.8	446	US-09-791-537-87710	Sequence 87710, A
16	448.5	18.6	448	US-09-685-775-5	Sequence 5, Appl
17	448.5	18.6	469	US-09-791-537-5349	Sequence 5349, Ap
18	443.5	18.4	449	US-09-791-537-83798	Sequence 83798, A
19	433	18.0	449	US-09-791-537-83823	Sequence 83823, A
20	431	17.9	467	US-10-219-999-44485	Sequence 44485, A
21	429.5	17.8	358	US-10-219-999-59629	Sequence 59629, A
22	425.5	17.7	314	US-10-219-999-45182	Sequence 45182, A
23	425.5	17.7	314	US-60-391-781-1348	Sequence 1348, Ap
24	424	17.6	497	US-10-219-999-44454	Sequence 44454, A
25	415	17.2	448	US-10-219-999-44526	Sequence 44526, A
26	410.5	17.0	326	US-09-935-625-19396	Sequence 19396, A

ALIGNMENTS

RESULT 1
US-60-360-039-6108
; Sequence 6108, Application US/603600039
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Chen, Xianfeng
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
; FILE REFERENCE: 38-10(52052)A
; CURRENT APPLICATION NUMBER: US/60/360,039
; CURRENT FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 6108
; LENGTH: 473
; TYPE: PRT
; ORGANISM: Caenorhabditis elegans
US-60-360-039-6108

Query Match	98.8%	Score 2382;	DB 7;	Length 473;
Best Local Similarity	93.4%	Pred. No. 1.7e+198;		
Matches 442;	Conservative 1;	Mismatches 0;	Indels 30;	Gaps 1;
QY	1	MVYDKNASGLRMKVDGKWLXSEELVKKHGGAVIQ-----	37	
Db	1	MVYDKNASGLRMKVDGKWLXSEELVKKHGGAVIQSIPLNKNKNIETRIITRGSN	60	
QY	38	-----YRNSDATHIFAFHEGSSQAYKOLDLLKKHGEHDEFLEKLEKRLDKVDINVS	90	
Db	61	ALDILFYRNSDATHIFAFHEGSSQAYKOLDLLKKHGEHDEFLEKLEKRLDKVDINVS	120	
QY	91	AYDVSVAQEKMKVSEKRLKLDGLMKANETYLEFKRAISTLSTMAFAFYLYLGWYI	150	
Db	121	AYDVSVAQEKMKVSEKRLKLDGLMKANETYLEFKRAISTLSTMAFAFYLYLGWYI	180	
QY	151	TSACLLALAWQQFGWLTHFCHQOPTKNRPLNDTISLFFGNFQGFSDRWKDKHNTHA	210	
Db	181	TSACLLALAWQQFGWLTHFCHQOPTKNRPLNDTISLFFGNFQGFSDRWKDKHNTHA	240	
QY	211	ATNVIDHDGDIAPLAFIPGDLCKYKASFKAIIKIVPYQHLIYFTAMLPMLRFSWTGQ	270	
Db	241	ATNVIDHDGDIAPLAFIPGDLCKYKASFKAIIKIVPYQHLIYFTAMLPMLRFSWTGQ	300	
QY	271	SVQWVEKENOMEKVVQRNFAFEQATVIGHWAWVFYQLFLLPTWPLRVAFYIISQMGGL	330	
Db	301	SVQWVEKENOMEKVVQRNFAFEQATVIGHWAWVFYQLFLLPTWPLRVAFYIISQMGGL	360	

Qy 331 LIAHVTFNHNVDKYPANSLNFAALQILTRNMTSPFIDWLWGLNYQIEHHLFP 390
Db 361 LIAHVTFNHNVDKYPANSLNFAALQILTRNMTSPFIDWLWGLNYQIEHHLFP 420
Qy 391 TMPRCNLNACVYKWKCKENNLPLYLVDVDFDGYAMNLOQLKNAEHQAKAA 443
Db 421 TMPRCNLNACVYKWKCKENNLPLYLVDVDFDGYAMNLOQLKNAEHQAKAA 473

RESULT 2
US-60-360-039-6107
; Sequence 6107, Application US/60360039
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Chen, Xianfeng
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)A
; CURRENT APPLICATION NUMBER: US/60/360, 039
; CURRENT FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 6107
; LENGTH: 454
; TYPE: PRT
; ORGANISM: Caenorhabditis elegans
US-60-360-039-6107

Query Match 44.8%; Score 1079; DB 7; Length 454;
Best Local Similarity 45.6%; Pred. No. 3e-85;
Matches 201; Conservative 84; Mismatches 140; Indels 16; Gaps 5;

Qy 12 MKVDGKWLVLSEELVKKHPGAVIEQYRNSDATHIFHAFHEGSSQAYKQLDLKKHGEHD 71
Db 13 IKIDGKWCDDAVLRSHPGSAITTKNMDATTVFHTFTGSGKEAYQWLTELKKECPTQ 72
Qy 72 E---FLEKQLEKRLDKVDINVSAYDVSVAQEK---KMWSEFEKLRQKLDHDDGLMKANETFL 127
Db 73 EPEIPDIDDPIDKID--DVMGTGNISERSAQINKSFDTLRMRVRAEGLMDGSPILFYI 130
Qy 128 FKAISTLSIMAFYLYQHLGYITTSACLLALAWQFGWLTHFCHQOQPTKNRPLNDTISL 187
Db 131 RKILETITILFAPYLYQHYLYLPSAILMGVAMQGLWLIHEFAHQLFKNRYNDLASY 190
Qy 188 FFGNFIQ-----GFSRDWKKKHNTTHAATNVVIDHGDIDLAPLPAFIPGDLCKYKAS 240
Db 191 FVGNFLQVSHIFNNGFSGGGKQHNHYHAATNVVGRDGLDLVPFYATVAEHLNNY--S 248
Qy 241 FEKAILKIVPYQHLVFTAMLPMLRFSWTGOSVQVWFKENQMEYKVVYORNAFWEQATVGH 300
Db 249 QDSWMTLFRQVHWHVTFMLPFLRLSLQSIIFVSOMPHYDYVRNTAIYEQVGLSLH 308
Qy 301 WAWVYQFLFLPTPLRVAVYFIISQMGGLLIARHVTFNHNSVDKYPANSLNFAALQ 360
Db 309 WANSGLQYLPDWSTRIMEFLVSHLVGFLGLSHVYFNHYSEKFALSNINSNACLO 368
Qy 361 ILTRNMTSPFIDWLWGLNYQIEHHLFPTMPRCNLNACVYKWKCKENNLPLYLVDV 420
Db 369 IMTRNMRPGRFIDWLWGLNYQIEHHLFPTMPRHLNLTVMPLVKFEFAAANGPLVMVDY 428
Qy 421 FDGYAMNLOQLKNAEHQAK 441
Db 429 FTGFWLEIEQFRNIA-NVAAK 448

RESULT 3
US-09-980-468-12
; Sequence 12, Application US/09980468
; GENERAL INFORMATION:

; APPLICANT: BASF Aktiengesellschaft
; TITLE OF INVENTION: D6 acetylenase and D6 desaturase from Ceratodon purpureus
; FILE REFERENCE: 99 1388
; CURRENT APPLICATION NUMBER: US/09/980,468
; CURRENT FILING DATE: 2002-12-03
; PRIOR APPLICATION NUMBER: 19925718.3
; PRIOR FILING DATE: 1999-06-07
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PatentIn Vers. 2.0
; SEQ ID NO 12
; LENGTH: 520
; TYPE: PRT
; ORGANISM: Ceratodon purpureus
US-09-980-468-12

Query Match 24.6%; Score 592; DB 5; Length 520;
Best Local Similarity 32.2%; Pred. No. 7.7e-43;
Matches 146; Conservative 79; Mismatches 154; Indels 74; Gaps 15;

Qy 18 WLYLSEEL-----VKKHPGAVIEQYRNSDATHIFHAFHEGSSQAYKQLDLKKHGEHD 71
Db 115 WIIIEKVDVSTFAEQHPGCTVINTYFGRDATDVSTFH--ASTSWKILQ----- 163
Qy 72 EFLEKQLEKRLDKVDINVSAYDVSVAQEK---KMWSEFEKLRQKLDHDDGLMKANETFL 128
Db 164 -----NFYIGNLVREPTLELLAKYRELRAFL--REQLFKSKSYLF 205
Qy 129 KAISTLSIMA-----FAFYLYQHLGYITTSACLLALAWQFGWLTHFCHQOQPTKNRPLND 183
Db 206 KTLINVSIVATSIATISLYKSYRA-VLLSASLMGLFIQCGWLSHDFLHHQVETRWLND 264
Qy 184 TISLFTGNGFLQGPSRDWKKKHNTTHAATNVVIDH-----DGDIDLAPLPAFIPGDLCKYK 238
Db 265 VGVYVGVNVLGVSQWTKKHLHHAAPNECDQKTPIDEDIDTLPILAWSKDLATVE 324
Qy 239 ASFEKAILKIVPYQHLVFTAMLPMLRFSWTGOSVQVWFK--ENQMEYKVVYORNAFWEQATI 297
Db 325 S---KTMRLVQLQHLFFLVLLTFAFASMLFWSAAFTLRPELTGKELLER-----GTM 375
Qy 298 VGHWA-----VFQLELPTPLRVAVFIISQMGGLLIARHVTFNHNSVDKYPANSLRIL 353
Db 376 ALHYIWFNSVAFY---LLPGWK--PVVMVVSSELSGFLIGYFVLSHNGMEVNTS---- 427
Qy 354 NPFALQILTRNMTSPFIDWLWGLNYQIEHHLFPTMPRCNLNACVYKWKCKENNL 413
Db 428 KDFVNAQIASTRIDKAGVFNDFWTGGLNQLGIEHHLFPTMPRHLNKLISPHVETLCKKHGL 487
Qy 414 PYLVDDYFDGYAMNLOQLKNAE---HIQAKAA 443
Db 488 VYEDVSMASGTYRVLTKLDVADAASHQQLAAS 520

RESULT 4
US-10-019-048-2
; Sequence 2, Application US/10019048
; GENERAL INFORMATION:
; APPLICANT: Heinz, Ernst
; APPLICANT: Girke, Thomas
; APPLICANT: Scheffler, Jodi
; APPLICANT: Da Costa e Silva, Oswaldo
; TITLE OF INVENTION: Plants expressing 6-desaturase genes, PUFAS-containing oils fro
; FILE REFERENCE: 0093/00032
; CURRENT APPLICATION NUMBER: US/10/019,048
; CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: PCT/EP00/006223
; PRIOR FILING DATE: 2000-07-04
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: WordPerfect version 6.1
; SEQ ID NO 2
; LENGTH: 525
; TYPE: PRT

; ORGANISM: Physcomitrella patens
US-10-019-048-2

Query Match	24.5%	Score 590.5;	DB 6;	Length 525;
Best Local Similarity	32.5%	Pred. No. 1e-42;		
Matches 140; Conservative	76;	Mismatches 160;	Indels 55;	Gaps 12;

Qy	19	LYLSEELVKKHPGGAVIEQYRNSDATHIFHAFHEGSSQAYKOLDLLKKHGHBEFLEKOL	78
Db	127	YVYDSNFADHEPGGSVISTYFGRDGTDFVSSFHAASTWKILQ-----DFYIGDV	175
Qy	79	EKRLDKVDINYSADVDSVAQEKKVVESPEKLRQKLHDDGLMKANETYFLFKAISPLSTMA	138
Db	176	ER-----VEPTPELKDPRMRAFLREQLFKSSKLYIVMKLLTNVAL--	218
Qy	139	FAFYLOVLGW-----YITSCLLALMAQQOGLWLTHERFCHOQPTKNRPLNDTISLFFGN	192
Db	219	FAASIAIICWSKTTISAVLASACMMALCFQCGWLSHDFLHQVFETRWLNEVGVYIGNA	278
Qy	193	LOGFSROWWKKDNTHHAATNVIDH-----DGDIDDLAPLAFIAPDGDLCKYKASPEKALIK	247
Db	279	VLGFSTGWWKEKHNHLHAAPNECDOTYQPIDEDIDTULPIAWSKDILATVE---NKTELR	335
Qy	248	IVPYQHLYFTAMLPMLRFSWTFQSQVQWFKENOMEYKYVQYRNAWEQATIVGHNAW-VFY	306
Db	336	ILQYQHLLFFMGLLFFARGSWLFWs--WRYTSTAVLSPV---DRLLEKGTVLFHFWFWGT	390
Qy	307	QLFLLPW--PURVAYFTISQMGGLLIAHVYTFNHNSSVDKYPANSRILNNFAALOILTR	365
Db	391	ACYLLPGWKPL--VYMAVTELSMGMLLGFVFLVSHNGMEVYNSS---KEFVSAQIVSTR	444
Qy	366	NMTPSPFTDLWLGLWGNQYIEHHLFPTMPCRNLCACVKYVKEMCKENNLPLYLVDDYFDGAY	425
Db	445	DIKNIFNDWTFTEGNLROIEHHLFPTMPRHNLKIAPREVFECKHGLVIEDVSIATGTC	504
Qy	426	MNLOOLKNMAE	436
Db	505	KVLKALKREAVS	515

```

RESULT      5
US-09-967-477B-8
; Sequence 8, Application US/09967477B
; GENERAL INFORMATION:
; APPLICANT: Xiao Qiu
; APPLICANT: Haiping Hong
; TITLE OF INVENTION: FAD4, FAD5, FAD5-2, AND FAD6, NOVEL
; TITLE OF INVENTION: FATTY ACID DESATURASE FAMILY MEMBERS AND USES THEREOF
; FILE REFERENCE: BNZ-001
; CURRENT APPLICATION NUMBER: US/09/967,477B
; CURRENT FILING DATE: 2002-04-16
; PRIOR APPLICATION NUMBER: 60/236,303
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: 60/297,562
; PRIOR FILING DATE: 2001-06-12
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 459
; TYPE: PRT
; ORGANISM: Thraustochytrium sp.
US-09-967-477B-8

```

```

Query Match      23.98; Score 577; DB 5; Length 459;
Best Local Similarity 33.98; Pred. No. 1.3e-41;
Matches 147; Conservative 67; Mismatches 158; Indels 62; Gaps 16;

QY 17 KWLVLSELVKKHPGGVAVIEQRYRNSDATHIFAHFEGSSQAYKQDLCLKKH--GEHDEFL 74
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 39 KW-----DSHPGGSSVMLTQACEDATDAFVHPSPSA-----LKLLEFYVGVGVDETS 85

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Qy	75	EKQLEKRLDKVDINVSAYDSVSAQEKKM---VVSFEKLRKLOKLHDDGLMKANETYFYFLKAI	131
Db	86	KAEIE-----GEPASDEERARRINEFIASRYLRVKVFGMGGLYDASALYYAWKL	137
Qy	132	STLSI---MAFAYLOYLGWYLTISACLLALAWOQGLWTFHECHQOPTKNRPLNDTISL	167
Db	138	STFGIIVLSMAICFFNFNSFAMVWGVINGLFTQOSGLWAHDELHNOVCENRTLGNLIGC	197
Qy	188	FFGFLQGSFSDWKKDKHNTTHAATNVIDH-----DGDIDILAPLFAFIPGDLCKYK	238
Db	198	LVGNAQWQGSFQWKKKHNHLHHAAPNL--HSAKDEGFIGDPDIDTWTPLAWSKE---MAR	252
Qy	239	ASFKA--ILKIVPYQHLIYFTAMLPMLRFSWGTOSVOWVFKENOMEYKYVQNAF--WEQ	294
Db	253	KAFESAHGPFPIRQNAQFLYPLLL--LARLSLWAQSFYFVFTE--FSFGIDKFVFDGPEK	309
Qy	295	ATIVGHAW-----VFYOLFLLPTWPLRVAFYIISOMGGLLIHAHVTFPHNSVDKYK	349
Db	310	AGLIHVYIWLAIPIYFCNMSLFE-----GVAYFLMGQSCGLLIALVFSIGHNMSVIERE	365
Qy	350	SRIINLFAALQILTRNNTSPSPFDIWLGGGLNTQIEHLEFPTTPRCNLACVKYVKEWC	409
Db	366	TK--PDEWQLQVTTTRNIRASVFDWDTGGGLNTQIDHLEFLPLVRPHNLKPVNVLKSLCK	423
Qy	410	ENNLPLYLVDDYFDG	423
Db	424	EFDIPFHFETGFWEQ	437

```

RESULT 6
US-03-980-468-2
; Sequence 2, Application US/09980468
; GENERAL INFORMATION:
; APPLICANT: BASF Aktiengesellschaft
; TITLE OF INVENTION: D6 acetyltransferase and D6
; FILE REFERENCE: 99 1388
; CURRENT APPLICATION NUMBER: US/09/980,468
; CURRENT FILING DATE: 2002-12-03
; PRIOR APPLICATION NUMBER: 19925718.3
; PRIOR FILING DATE: 1999-06-07
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PatentIn Vers. 2.0
; SEQ ID NO 2
; LENGTH: 483
; TYPE: PRT
; ORGANISM: Ceratodon purpureus
US-03-980-468-2

```

Query Match	23.2%	Score 559;	DB 5;	Length 483;
Best Local Similarity	32.6%	Pred. NO. 5.2e-40;		
Matches 136;	Conservative	66;	Mismatches 155;	Indels 60;
Gaps 13;				

Qy	18	WLYLSEEL-----VKKHGGAVTEQYRNSDATHIFAHFHEGSSQAYKQLDLLKKHGEHD	71
		: : : : : : : : : : : : : : :	
Db	78	WMIKVEKVIDISREADHPGVTISTYFGRGDGTDFATFHPPA--AMWKQ-----ND	127
		: : : : : : : : : : : : : : :	
Qy	72	EFL-EKOLEKRLDKVDINVSAYDSVAQEKWVESPEKLRQLDGLDKMKANETYFLFK-	129
		: : : : : : : : : : : : : : :	
Db	128	YYIGDLAREPDL-----ELKDYDRMAEFVRGLFKSSKANWFLQOT	170
		: : : : : : : : : : : : : : :	
Qy	130	---AISTLSIMAFYQLYLGWYIT-SACLLALAAWQOFGWLTHEFCHOOPTKNRPLNDT	184
		: : : : : : : : : : : : : : :	
Db	171	LINAALFAASTATICYDKSY--WAIVLASLGMGLFVQOCGLAHDFLHQOVFNRTANSF	228
		: : : : : : : : : : : : : : :	
Qy	185	LSLEFGFNLOGFSRDWKKDKHNTHAATNVIDH-----DGDIDLAPLFIAPGDLCKYA	239
		: : : : : : : : : : : : : : :	
Db	229	FGYUFGNCVLGFSVSWWRTKHNIHTHPNCEDSQYTPLEDIDITPLIIAWSKEILATVES	288
		: : : : : : : : : : : : : : :	
Qy	240	SFEKAILKIPYQHLFYETAMLPMLRFSGVSGVOWVFKEKNOMEKYVYQRNAPFEQATIVG	299
		: : : : : : : : : : : : : : :	
Db	289	---KRILRVLOYOHYMILPLFLFWARYSWTFGSLTFENPDLSITTK-----GLIEKGTAVF	340
		: : : : : : : : : : : : : : :	

[illegible]

RESULT 7

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US-09-980-468-4
; Sequence 4, Application US/09980468
; GENERAL INFORMATION:
; APPLICANT: BASF Aktiengesellschaft
; TITLE OF INVENTION: D6 acetylase and D6 desaturase from Ceratodon purpureus
; FILE REFERENCE: 99 1388
; CURRENT APPLICATION NUMBER: US/09/980,468
; CURRENT FILING DATE: 2002-12-03
; PRIOR APPLICATION NUMBER: 19925718.3
; PRIOR FILING DATE: 1999-06-07
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PatentIn Vers. 2.0
; SEQ ID NO 4
; LENGTH: 483
; TYPE: PRT
; ORGANISM: Ceratodon purpureus
US-09-980-468-4

```

Query Match 23.2%; Score 559; DB 5; Length 483;
Best Local Similarity 32.6%; Pred. NO. 5.2e-40;
Matches 136; Conservative 66; Mismatches 155; Indels 60; Gaps 13;

Qy	18	WLYSBEI-----VKHPGCAVIEOYRNSDATHIHFAPHEGSSQAYKOLDLLKXGHEHD	71
Db	76	WMIWKEVYDISRFADHPGGTVISTYFGDCDVFATEFHPA--AWKOL-----ND	127
Qy	72	EFL-EKOLEKRLDKDVINSAYDVSVAQEKWVSEKLRLOKLDHDLGMKANETVFLFK-	129
Db	128	YYIGDLAREEPLD-----ELUKDYRDMRAEFVREGLFKFSKAMFLIGT	170
Qy	130	---AISTLSIAFAFYLOYLGYIIT-SACLLALAMQQFCWLTHFCHOOPTKNPLNDT	184
Db	171	LINAALFAASIATICYDKSY--WAIVLSASLMGLFVQCGWLADHDLHQQVEENRTANSF	228
Qy	185	ISLFFGNFLOGFSRDKWKKHHTHHAATNVIDH-----DGDIDLPLFAFIPGDLCKYKA	239
Db	229	FGYLFNCVLGFSVSWRTRKHNHTHPACNEDCQYITPLDEDIDTLPFIAWSKEILATVES	288
Qy	240	SPEKATLKIVPYOHLFYFTAMLPMRESWTGOSVQWVFKEQNQMEYKVYQORNAWEQATIVG	299
Db	289	---KRILRVLOYOHYMLPLLFNARYSWTFGSLFFTFNFDLSTTK-----GLIEKGTVAF	340
Qy	300	HWAWFVYQLF-LDPTWPLRVAYFIIISQMGGLLIHAHVTFNHSVDKYVPANSRILNNFAA	358
Db	341	HYAWFSAAPHILPGYAKPLANWVATELVAGLLGLGFVFTLSHNGREYNES---KDFVR	396
Qy	359	LQILTRNMTSPSFDIOWLNGGLNYQTEHHLFPTMPRCNLNACVKYVKWECKENNILPY	415
Db	397	AQVITTRNTKRGWFNDWFGGLDQTEHHLFPTMPRHNYPKTAPQVLEALCKKHGLEYG	453

RESULTS

```

US-09-791-537-137323
; Sequence 137323, Application US/09791537
; GENERAL INFORMATION:
; APPLICANT: Bionomix, Inc.
; APPLICANT: Debe, Derek
; APPLICANT: Danzer, Joseph
; TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBERS
; TITLE OF INVENTION: METHODS OF USE THEREOF
; FILE REFERENCE: 261/210
; CURRENT APPLICATION NUMBER: US/09/791,537

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; CURRENT FILING DATE: 2001-02-22
; NUMBER OF SEQ ID NOS: 153055
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 137323
; LENGTH: 457
; TYPE: prt
; ORGANISM: Mortierella alpina
US-09-791-537-137323

```

Query Match 23.1%: Score 557; DB 5; Length 457;

Best Local Similarity	32.1%;	Pred. No. 7.2e-40;	
Matches 143: Conservative	64;	Mismatches 187;	Indels 52; Gaps 11;

Qy	12	MKVDGKWL	Y	SEELVKKH	PGCAVIEQ	VRNSDATHI	FHAHEGSSQAY	KQLDLLKKHGEHD	71
			:						:
Db	34	MIDNK	-	VYDREVP	DHPGGS	WILTHVG	KDGTDFV	DTFHPEAAW	77
			:						:
Qy	72	EFLEKQLEK	R	LKVD	INVSAYD	SVSAQEKW	VESEFKRLQK	LHDDGLMKANET	Y
			:		:		:		:
Db	78	ETLANFY	V	GDI	DSRD	IKND	DFEA	-AEVRKLRTLP	OSL
			:		:		:		:
Qy	132	STLSIMAF	A	FAYLQY	LGW	-----	YITSACLLA	LAWQFGWL	THEFCHOOPT
			:		:		:		:
Db	130	FNLCTW	GLST	TVI	-	VAKWG	QST	STLANVL	SAALLGFW
			:		:		:		:
Qy	185	ISLFFG	N	FGFLG	FSG	SDWK	KDKNTH	HHAATN	VIDHGD
			:		:		:		:
Db	189	FGAFLG	V	CGCG	FS	SSWW	KDKNTH	HAAPNV	HGSDPD
			:		:		:		:
Qy	234	LCKYKAS	F	EKA	ILKIV	PYQRL	HYTA	MLP	RF
			:		:		:		:
Db	249	LTRMWS	R	E	-----	MVLN	QTW	FYF	ILSPARLS
			:		:		:		:
Qy	292	WEQATV	G	HNAW	FYQ	LFLPT	WPLR	-	VAYFIISQ
			:		:		:		:
Db	303	VEQLSLA	M	HWT	WT	IAT	MFLE	IKOP	VNMLY
			:		:		:		:
Qy	351	RILN	NEA	ALQIL	AT	TRN	TPSP	FD	LWLGL
			:		:		:		:
Db	363	AVDM	DF	FTK	LIIG	CRD	VHPGL	FAN	WTF
			:		:		:		:
Qy	411	NNLP	YL	DDY	DDY	EDG	YAM	LQ	LKNAE
			:		:		:		:
Db	423	VNRY	HT	TG	MT	EGT	AEV	FS	LN
			:		:		:		:

RESULTS

```

RESOL.
US-09-791-537-28566
; Sequence 28566, Application US/09791537
; GENERAL INFORMATION:
; APPLICANT: Bionomix, Inc.
; APPLICANT: Debe, Derek
; APPLICANT: Danzer, Joseph
; TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBERS AND METHOD OF USE THEREOF
; TITLE OF INVENTION: METHODS OF USE THEREOF
; FILE REFERENCE: 261/210
; CURRENT APPLICATION NUMBER: US/09/791,537
; CURRENT FILING DATE: 2001-02-22
; NUMBER OF SEQ ID NOS: 153055
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 28566
; LENGTH: 457
; TYPE: PRT
; ORGANISM: Mortierella alpina
US-09-791-537-28566

```

Query Match

Query Match	23.1%; Score 550, DB 5; length 457,
Best Local Similarity	31.8%; Pred. No. 8.8e-40;
Matches 142: Conservative	64: Mismatches 188:
	Indels 52: Gaps 11:

QV 12 MKVDGKWLYLSEELVKKHPPGGAVIEWQYRNSDATHIFHAFHEGSSQAYKQLDLLKKHGEHD 71

Db 34 MIIDNK-VYDREVPDHEGGSVILTHVGKDGTDVDFHPEAAW----- 77
QY 72 EFLEKLEKRLDKVDINVSAYDVAQEKMMVESFEKRLQKLDHGLDGLKANKETVFLFKAI 131
Db 78 ETLANFYVGDIDESDRAIKNDFA-AEVKRLTLFQSL-----GYDSSKAYAFKVS 129
QY 132 STLSIMAFAYLOYLGW-----YITSACLALAWQFGWLTHFECHQOQPTKNRPLNDT 184
Db 130 FNLICWGLSTFI-VAKGWGTSTLANVLSAALLGLFWQCGWLAHDPLHQLHVQDREPWGDL 188
QY 185 ISLFFCNFLQGSROWKDKHNTHTHAATNVVDHGDIDILAPL-----FAFTPG-D 233
Db 189 FGAFJGVGCGFSSSSWKDKHNTHTHAAPNVHGEDPDIDTHPLLTWSEHALEMFSDVPDEE 248
QY 234 LCKYKASFEKAILKIVPYQHLVFTAMLPMLRFSWTGQSVQVWFENOMYKVVQR--NAF 291
Db 249 LTRMSRF-----WVLTWTFYFPLSPARLSWCLQSINFVLPNQAHKPSGARVPISL 302
QY 292 WEOATVGHAWVYOLFLLPTWPLR-VAYFIISQMGGLLIAHVTFNHNNSVDKYPANS 350
Db 303 VEQLSLAMHWTVLATMFLFIKDPVNMIVFLVSOAVCGNLLAIVFSLNHNMGMPVSKKEE 362
QY 351 RIILNFAALQILTRNMTSPFIDWLWGLNGLYQIEHHLFTPMPCNLNACVYVKEWCKE 410
Db 363 AYVMDFFTKOIIITGRDVHPLGANWFTGGLNYQIEHHLFSPMRHNFSKIQPAVETLCKK 422
QY 411 NNLPLYVDDYFDGYAMNLOQLKNMAE 436
Db 423 YGVRHTTGMIEGTAEVFSLNEVSK 448

RESULT 10

US-09-935-625-19395
; Sequence 19395, Application US/09935625
; GENERAL INFORMATION:
; APPLICANT: N. ALEXANDROV et al.
; TITLE OF INVENTION: POLYNUCLEOTIDES, POLYPEPTIDES, CELLS, AND METHODS THEREOF CAPABLE
; FILE REFERENCE: 2750-1481P
; CURRENT APPLICATION NUMBER: US/09/935,625
; CURRENT FILING DATE: 2001-08-24
; NUMBER OF SEQ ID NOS: 33136
; SEQ ID NO 19395
; LENGTH: 449
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; NAME/KEY: peptide
; LOCATION: 1..449
; OTHER INFORMATION: Ceres Seq. ID no. 1807271
US-09-935-625-19395

Query Match 19.2%; Score 463.5; DB 5; Length 449;
Best Local Similarity 30.5%; Pred. No. 9.4e-32;
Matches 138; Conservative 67; Mismatches 186; Indels 61; Gaps 19;
QY 10 LRKVDGKWLKYLSEELVKKHPGG-AVIEQYRNSDATHIFAFHEGSSQAYKOLDLLKKHG 68
Db 24 LWISIQGK-VYDVSQWVKSHPGGERAILNLAQDVTDAFIAYHPTG--AWHHEKL-HNG 79
QY 69 EHDEFLEKLEKRLDKVDINVSAYDVAQEKMMVESFEKRLQKLDHGLDGLM--KANETVF 126
Db 80 YHVR-----DHHVS--DVS-----RDYRRLAAEFKRGLEFDKKGHTVLY 116
QY 127 LFKASTLSIMAFAYLOYLG-----W-YITSACLALAWQFGWLTHFECHQOQPTKNRPL 181
Db 117 ---TLTCVGMVLAANLYGVLAQTSIAWHLISAVLLGLLWISQAYVGHDSGHVTVSTKPC 173
QY 182 NDTISLFFCNFLQGSROWKDKHNTHTHAATNVVDHGDIDILAPLFA-----FIPGDLCKY 237
Db 174 NKLIQLLSCNLTGSIAMWKTWTHNAHHTACNSLDHDPDLQHIPIFAVSTKFFNSMTSRF 173
QY 182 NDTISLFFCNFLQGSROWKDKHNTHTHAATNVVDHGDIDILAPLFA-----FIPGDLCKY 237
Db 174 NKLIQLLSCNLTGSIAMWKTWTHNAHHTACNSLDHDPDLQHIPIFAVSTKFFNSMTSRF 233

QY 238 ---KASFEKAILKIVPYQHLVFTAMLPMLRFSWTGQSVQVWFENOMYKVVQRNAFWEQ 294
Db 234 YGRKLTDFDLARFLISYQHWTFYPMCVGRINLFIOTFLLLSKRHPVDRAL-----NI 287
QY 295 ATIVGHAWVYOLFLLPTWPLRVAIFYIISQMGGLLIAHV-VTFNHNNSVDKY--PANSR 351
Db 288 AGILVFWTWFPFLVSVLPNQWERFIFVFS--FAVTAIQHVQFCLNHFADVYTGPPNG- 344
QY 352 ILNNAFAALQILTRNMTSPFIDWLWGLNGLYQIEHHLFTPMPCNLNACVYVKEWCKEN 411
Db 345 ---NDWFEKOTACTLDISCRSFMDFGGLQFQLEHHLFPLRPLRCHLRTVSPVVKELCKKH 402
QY 412 NLPYLVDYFDGYAMNLOQLKNMAEHIQAKA 443
Db 403 NLPYRSLSWNEANVTIRTKNAA--IOARDA 432
RESULT 11
US-09-791-537-131173
; Sequence 131173, Application US/09791537
; GENERAL INFORMATION:
; APPLICANT: Bionomix, Inc.
; APPLICANT: Debe, Derek
; APPLICANT: Danzer, Joseph
; TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
; TITLE OF INVENTION: METHODS OF USE THEREOF
; FILE REFERENCE: 261/210
; CURRENT APPLICATION NUMBER: US/09/791,537
; CURRENT FILING DATE: 2001-02-22
; NUMBER OF SEQ ID NOS: 153055
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 131173
; LENGTH: 449
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-09-791-537-131173
Query Match 19.2%; Score 463.5; DB 5; Length 449;
Best Local Similarity 30.5%; Pred. No. 9.4e-32;
Matches 138; Conservative 67; Mismatches 186; Indels 61; Gaps 19;
QY 10 LRKVDGKWLKYLSEELVKKHPGG-AVIEQYRNSDATHIFAFHEGSSQAYKOLDLLKKHG 68
Db 24 LWISIQGK-VYDVSQWVKSHPGGERAILNLAQDVTDAFIAYHPTG--AWHHEKL-HNG 79
QY 69 EHDEFLEKLEKRLDKVDINVSAYDVAQEKMMVESFEKRLQKLDHGLDGLM--KANETVF 126
Db 80 YHVR-----DHHVS--DVS-----RDYRRLAAEFKRGLEFDKKGHTVLY 116
QY 127 LFKASTLSIMAFAYLOYLG-----W-YITSACLALAWQFGWLTHFECHQOQPTKNRPL 181
Db 117 ---TLTCVGMVLAANLYGVLAQTSIAWHLISAVLLGLLWISQAYVGHDSGHVTVSTKPC 173
QY 182 NDTISLFFCNFLQGSROWKDKHNTHTHAATNVVDHGDIDILAPLFA-----FIPGDLCKY 237
Db 174 NKLIQLLSCNLTGSIAMWKTWTHNAHHTACNSLDHDPDLQHIPIFAVSTKFFNSMTSRF 233
QY 238 ---KASFEKAILKIVPYQHLVFTAMLPMLRFSWTGQSVQVWFENOMYKVVQRNAFWEQ 294
Db 234 YGRKLTDFDLARFLISYQHWTFYPMCVGRINLFIOTFLLLSKRHPVDRAL-----NI 287
QY 295 ATIVGHAWVYOLFLLPTWPLRVAIFYIISQMGGLLIAHV-VTFNHNNSVDKY--PANSR 351
Db 288 AGILVFWTWFPFLVSVLPNQWERFIFVFS--FAVTAIQHVQFCLNHFADVYTGPPNG- 344
QY 352 ILNNAFAALQILTRNMTSPFIDWLWGLNGLYQIEHHLFTPMPCNLNACVYVKEWCKEN 411
Db 345 ---NDWFEKOTACTLDISCRSFMDFGGLQFQLEHHLFPLRPLRCHLRTVSPVVKELCKKH 402
QY 412 NLPYLVDYFDGYAMNLOQLKNMAEHIQAKA 443

Db 403 NLPYRSLSWNEANVTITLKNAA--IQARDA 432

RESULT 12

US-09-791-537-146143

; Sequence 146143, Application US/09791537

; GENERAL INFORMATION:

; APPLICANT: Bionomix, Inc.

; APPLICANT: Debe, Derek

; APPLICANT: Danzer, Joseph

; TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBERS

; FILE OF INVENTION: METHODS OF USE THEREOF

; FILE REFERENCE: 261/210

; CURRENT APPLICATION NUMBER: US/09/791,537

; CURRENT FILING DATE: 2001-02-22

; NUMBER OF SEQ ID NOS: 153055

; SOFTWARE: Patent in version 3.0

; SEQ ID NO 146143

; LENGTH: 458

; TYPE: PRT

; ORGANISM: Helianthus annuus

US-09-791-537-146143

Query Match 19.1%; Score 460.5; DB 5; Length 458;

Best Local Similarity 28.1%; Pred. No. 1.8e-31;

Matches 131; Conservative 71; Mismatches 191; Indels 61; Gaps 16;

QY 6 NASGLRMKVDGKWLSEELVKKHPGG-AVIEQYRNSDATHIFHAFHEGSSQAYKQLDLL 64

Db 29 NPNDLWISLIGK-VYNTWAKEHPGGADPLINLAGODVTDATFAPHGT--AWKHLIDL 85

QY 65 KKHGEHDEFLEKLEKRLDKVDINVSAYDVSVAQEKKMWSEFEKRLKLDHDDGLMKANET 124

Db 86 -----FTGYHLKDYQVSDISRDYKLADEFKAGMEKKGH 121

QY 125 YELFK-AISTLSIMAFAYLOYLG--W-YITSACLALAWQOFGWLTHFCHOOPTKMRP 180

Db 122 GVVISLCFVLSLLSACVYGVLYSGSFVHMLSGAILGLANWQIAYLGHADAGHYQMAMTRG 181

QY 181 LNDTISLFFGNLQFGRDWDKHNTHAATNVIDHDGDIPLA-----LFAETPGD 233

Db 182 WNFAGIFGNCITGSIWAKWTHNAHACNSLDYDPOQLHPLMNAVSKLFSNITSV 241

QY 234 LCKYKASFKAILEKIVPYOHLFTAMPLRFSWTGQSVQWVFKEQMEYKVKYQNAFWE 293

Db 242 FYGRLTFDPLARFVSQHYLYPIYMCVARVNLXLQITILLISKR----KIPDRG--- 293

QY 294 QATVIG---HWAVFYQLFLPTWPLRVAYFIISQMGGLLIAHV-VTFNHNVDKY--P 347

Db 294 -LNLGLTFLFTWFPPLVSLRPNMPEKVAFLVSVFCVTG--IQHIQTLNHFSGDVYVGP 350

QY 348 ANSRILNFAALQITLTNRNTPSPFDIWLWGLNYQIEHLLFTMPRCNLNACVYKWEK 407

Db 351 PKG---DNWFEKOTRTGIDTACSWMDWFFGQFQLEHLLFPRLPCHLRISPCREL 407

QY 408 CKNNPLVDDYFDGYAMNLOQLKNMAEHIQAK 441

Db 408 CKKNPLVSVSYDANVTTLKTLRTAA--LQAR 439

RESULT 13

US-09-791-537-105419

; Sequence 105419, Application US/09791537

; GENERAL INFORMATION:

; APPLICANT: Bionomix, Inc.

; APPLICANT: Debe, Derek

; APPLICANT: Danzer, Joseph

; TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBERS

; FILE OF INVENTION: METHODS OF USE THEREOF

; FILE REFERENCE: 261/210

; CURRENT APPLICATION NUMBER: US/09/791,537

; CURRENT FILING DATE: 2001-02-22

; NUMBER OF SEQ ID NOS: 153055

; SOFTWARE: Patent in version 3.0

; SEQ ID NO 105419

; LENGTH: 448

; TYPE: PRT

; ORGANISM: Borago officinalis

US-09-791-537-105419

Query Match 19.0%; Score 457.5; DB 5; Length 448;

Best Local Similarity 28.1%; Pred. No. 3.1e-31;

Matches 128; Conservative 72; Mismatches 184; Indels 71; Gaps 15;

QY 10 LRMKVDGKWLSEELVKKHPGGAV-IEQYRNSDATHIFHAFHEGSSQAYKQLDLLKKGH 68

Db 23 LWISIQGK-AVDYSDWVKDHPGSGFPLKSLAGQEVTDADFVAFHPASTW----- 69

QY 69 EHDEFLEKLEKRLDKVDINVSAYDVSVAQ-----EKKMWSEFEKRLKLDHDDGLMKANET 124

Db 70 -----KNLDRKFTGYLYKDYSVSEVSKDYRKLKLEFEFSKM--GLYD-----KKG 110

QY 125 YELFKAISTLSIMAFAYLOYLG-----WYITSACLALAWQOFGWLTHFCHOOPT 176

Db 111 HIMP---ATLCFIAMLFAMSVYGVLCFEGVLVHLFSCCLMGFLWISQGWIGHAGHYMVV 167

QY 177 KNRLPNDTISLFFGNLQFGRDWDKHNTHAATNVIDHDGDIPLA-----LFAF 229

Db 168 SDSRLNKFMGIFAANCLSGISIGWKKWNHNAHACNSLEYDPOQLYIPFLVYSSKFFGS 227

QY 230 IPDGLCKYKASFKAILEKIVPYOHLFTAMPLRFSWTGQSVQWVFKEQMEYKVKYQNRN 289

Db 228 LTSHFYEKRLTFPSLSRFFSVYQHTFYIPMCAARLNMVYOSLIMLLTKRNVSYRAHE-- 285

QY 290 AFEQATVIGHWAW-VFYQLFL--LPTWPLRVAYFIISQMGGLLIAHV-VTFNHNVDKY 346

Db 286 -----LLCCLVFSIYVPLLVSLCLPNWGERIMFVTLASVTGNQOQV--FSLNHFSSVY 337

QY 347 PANSRILNFAALQITLTNRNTPSPFDIWLWGLNYQIEHLLFTMPRCNLNACVYKYE 406

Db 338 VGKPK-GNNWFEKOTDGTDLDISCPWMDWFFGQFQLEHLLFPKPRCLNRKISPVIE 396

QY 407 WCKENPLVDDYFDGYAMNLOQLKNMAEHIQAK 441

Db 397 LCKKHLNLPYNSAFSKANEMTLRLTA--LQAR 429

RESULT 14

US-09-791-537-102275

; Sequence 102275, Application US/09791537

; GENERAL INFORMATION:

; APPLICANT: Bionomix, Inc.

; APPLICANT: Debe, Derek

; APPLICANT: Danzer, Joseph

; TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME

; FILE OF INVENTION: METHODS OF USE THEREOF

; FILE REFERENCE: 261/210

; CURRENT APPLICATION NUMBER: US/09/791,537

; CURRENT FILING DATE: 2001-02-22

; NUMBER OF SEQ ID NOS: 153055

; SOFTWARE: Patent in version 3.0

; SEQ ID NO 102275

; LENGTH: 448

; TYPE: PRT

; ORGANISM: Borago officinalis

US-09-791-537-102275

Query Match 18.9%; Score 454.5; DB 5; Length 448;

Best Local Similarity 28.1%; Pred. No. 5.7e-31;

Matches 128; Conservative 71; Mismatches 185; Indels 71; Gaps 15;

QY 10 LRMKVDGKWLSEELVKKHPGGAV-IEQYRNSDATHIFHAFHEGSSQAYKQLDLLKKGH 68

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Db 23 LWSIQGK-AYDVSDWKDPHGGSPFLKSLAQGEVTDFAVAFHPASTW----- 69
QY 69 EHDEFLEKLEKRLDKVDINVSAYDSVAO-----EKKMVESEKLEKROKLDHDLGMLKANET 124
Db 70 -----KNLDEFTGYLKYDSYSEVSKDKRLVFEFSKM--GLYD-----KKG 110
QY 125 YELFKAISTLSIMAFAYIQLYLG-----WYITSACILALAWOQFGWLTHEFCHQOPT 176
Db 111 HLMF---ATLCFIAMLFAMSVYGLVFCGVLVHLSGCLMGLFWIQSGWIGHDAGHYMVV 167
QY 177 KRPINDTISLFFGFLQFSDWKKDKNTHAATNVIDHGDIDLAP-----LEAF 229
Db 168 SDSRLNKGFIFAANCLSGISGKWNHNAHIAACNSLEYDPDQYIPFLVVSCKFFGS 227
QY 230 IPGDLCYKASFEKAILKIVPYOHLYFTAMLPLRFSWTGQSVQWVFKENOMEYKVIYORN 289
Db 228 LTSHEYERKELTDSLSRFSVYQHTFTYFIMCAARLNMYQSLIMLLTKRNVSYRAQE-- 285
QY 290 AFWEQATIVGHAW-VFYQLFL--LPTWPLRVAYFIISOMGGGLLIAHVVTFNHNSVDKY 346
Db 286 -----LLGCLVFSIWTYPLLVSCLPNMGERTMFVIASLVGTMOQVQ-FSLNHFSSVY 337
QY 347 PANSRLNNFAALQILTTNNMTSPFIDWLWGGLNYQIEHHLFPTMPRCNLNACVKYVKE 406
Db 338 VGKPK-GNNWFEKQTDGTLDISCPWMDWFHGGLOFQIEHHLFPMKPRCNLRKISPYVIE 396
QY 407 MCKENNLPLYVDVDFDGYAMNLQOLKNMAEHIOAK 441
Db 397 LCKKHNLPLYNASFSKANEMTLRLNTA--LQAR 429

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RESULT 15

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US-09-791-537-87710
; Sequence 87710, Application US/09791537
; GENERAL INFORMATION:
; APPLICANT: Biomomix, Inc.
; APPLICANT: Debe, Derek
; TITLE OF INVENTION: Danzer, Joseph
; TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMB
; TITLE OF INVENTION: METHODS OF USE THEREOF
; FILE REFERENCE: 261/210
; CURRENT APPLICATION NUMBER: US/09/791,537
; CURRENT FILING DATE: 2001-02-22
; NUMBER OF SEQ ID NOS: 153055
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 87710
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Ricinus communis
US-09-791-537-87710

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Query Match 18.8%; Score 452; DB 5; Length 446;
Best Local Similarity 28.5%; Pred. No. 9.3e-31;
Matches 130; Conservative 65; Mismatches 195; Indels 66; Gaps 14;

QY 6 NASGLRMKVDGKWLSELVKKHPGG-AVIEQYRNSDATHIFHAFHGGSSQAYKQLDILL 64
Db 18 NPGDLWISIQGK-IYVNTDWSKDHGGVSPLLHLAGQDVTDFAVAYHPCATAWQY----- 70
QY 65 KKHGEHDEFLEKLEKRLDKVDINVSAYDSVAQEKK-----MVESFEKLRKLDHDDGLMK 120
Db 71 -----LDKFTGYHLKDYSVSETSKDYRRILVAEFSKL-----GPEK 106
QY 121 ANETYP--LFKAISTLSIMAFAYIQLYLGW-YITSACILALAWOQFGWLTHEFCHQOPTK 177
Db 107 KGHIAFITLVSMVMLLALSIVYGLCSNSTWVHLISGGLMGNWISQSGWIGHDSGHYQVMN 166
QY 178 NRPLANDTISLFFGFLQFSDWKKDKNTHAATNVIDHGDIDLAPFAF-----I 230
Db 167 SRRFNRLAQILSGNCLAGISIAWKNHNTHHIACNSLDLDPDLQHMPPFAVSSKFFSSI 226
QY 231 PGDLCKYKASFEKAILKIVPYOHLYFTAMLPLRFSWTGQSVQWVFKENOMEYKVIYQRNA 290

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Db 227 TSYFYERKMNFDCAAREFLVSYQHLYTFYPMCFARINLFAQISLILLSKRRV-----ANR 280
QY 291 FHEQATIVGHAWVYQIQLFLLPTWPLRV-----AYFIISOMGGGLLIAHV-VTFNHNSSVDK 345
Db 281 GOEILGVLVFWIWTYFPLVSVCLPNWGERVMFVAASFVTR-----IOHVQFCLNHFSSSV 334
QY 346 YPANSRILNNFAALQILTTNNMTSPFIDWLWGGLNYQIEHHLFPTMPRCNLNACVKYVKE 405
Db 335 Y-LGLLIANDWFENQTKGTLDTICSSWMDWFHGGLOFQMEHHLFPLRPRVLRKYSPFVR 393
QY 406 EWCENNLPLYVDVDFDGYAMNLQOLKNMAEHIOAK 441
Db 394 ELCKKHNLPLYDSASFNANELTFTKTLR--AAALQAR 427

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Search completed: October 3, 2002, 09:51:21
Job time: 282 sec
